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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,039	12/29/2000	Blair E. Nygren	019143.0339	7737
7590	05/17/2005		EXAMINER	
			ONUAKU, CHRISTOPHER O	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/751,039	NYGREN ET AL.	
	Examiner	Art Unit	
	Christopher O. Onuaku	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 21 January 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,2,4-13 and 15-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,2,11-13 and 22 is/are rejected.
- 7) Claim(s) 4-10&15-21 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

NOTE

After careful consideration, objection to former claims 3&14 have been withdrawn, and the amended claims 1&12 are rejected under the following grounds.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1,2,12&13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (US 5,050,230).

Regarding claim 1, Jones et al disclose a method of storing (see optical discs or magnetic tape; col.1, lines 35-51) and displaying (on video monitors, for example) digital images, including a multiresolution method which makes available reduced resolution versions of original images for quick display and full resolution original images for making photographic quality hardcopies, comprising:

a) storing a first video frame that includes video data (see Fig.2 and image G3);

- b) storing a first video sub-frame comprising second video data that is different from the first video data (see Fig.2 and residual image L2)
- c) generating a second video frame using the first video frame and the first video sub-frame (see Fig.2 and image G2);
- d) storing a second video sub-frame comprising third video data that is different from the video data of the second video frame (see Fig.2 and residual image L1); and
- e) generating a third video frame using the second video frame and the second video sub-frame (see Fig.2 and image G1);
- f) generate a fourth video frame using the third video frame and the third video frame (see Fig.2 and residual image L0);
- g) storing a fourth video frame comprising fourth video data (see Fig.2 and image G0).

Jones et al fail to explicitly disclose storing a third video sub-frame comprising fifth video data that is different from the fourth video data, generating a fifth video frame using the fourth video frame and the third video sub-frame. But this would have been an obvious engineering design consideration depending on the circuit at hand.

Furthermore, Jones et al disclose that the invention is related to a method of storing and displaying digital images (see col.1, lines 10-17). However, Jones et al fail to explicitly disclose displaying the first video frame (i.e., image G3 of Fig.2) and displaying the fourth video frame. It would have been obvious to display any image as desired, including the image G3 of Fig.2, and image formed by the fourth video frame, in order, for example, to satisfy a user's desired image display design requirements.

Regarding claim 2, Jones et al fail to explicitly disclose generating a predetermined number of video frames for storage in a queue prior to displaying the first video frame. However, Jones et al disclose the generation of images G1-G3, for example. And, as discussed above, Jones also disclose wherein the invention is related to a method of storing and displaying digital images . It, therefore, would have been obvious to queue the generated images G1-G3 in a storage means before starting to display the images, beginning with any desired image, including image G3 (first image), in order to satisfy a user's desired image display design requirement.

Regarding claim 12, the claimed limitations of claim 12 are accommodated in the discussions of claim 1 above.

Regarding claim 13, the claimed limitations of claim 13 are accommodated in the discussions of claim 2 above.

4. Claims 11&22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al in view of Best (US 4,305,131).

Regarding claim 11, Jones et al fail to explicitly disclose the processing of audio signal. Further, Jones et al fail to explicitly disclose the method wherein displaying is synchronized with the reproduction of a voice session associated with the video session.

Best teaches voice controlled television, electric amusement devices, motion pictures and sound synchronizing, videodisc retrieval, digital generating of animated cartoons, and branching motion pictures, wherein commands are executed by generating precisely timed video and audio signal so that a motion picture with lip-synchronized sound is presented to the viewer (see Abstract), and wherein special-purpose microcomputer may automatically schedule and control presentation of video frames, and/or digitally-generated animated cartoons, and digitized audio which is automatically lip-synced with the motion picture (see col.3, lines 38-58).

From the above, it can be seen that Best discloses the principle of video-audio synchronization, thereby, for example, providing a lip-synchronized movie having a seamless flow through alternative story lines. Furthermore, it is well known to one of ordinary skill in the art to synchronize audio with video in a story line, in order, for example, to provide the video of a movie that synchronizes with the movie audio, thereby making the movie more complete and more entertaining.

Therefore, it would have been obvious to modify Jones by incorporating the Jones system with an audio means in order to provide an audio signal. Furthermore, it would have been obvious to synchronize the audio with video in order, for example, to provide the audio signal that can synchronize with video image in a given session, thereby making the video session more complete and more entertaining.

Regarding claim 22, the claimed limitations of claim 22 are accommodated in the discussions of claim 11 above.

Allowable Subject Matter

5. Claims 4-10&15-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 4, the invention relates to communication systems, including a system for reproducing a video session using accelerated frame playback.

The closest references Jones et al disclose a method of storing and displaying digital images, including a multiresolution method which makes available reduced resolution versions of original images for quick display and full resolution original images for making photographic quality hardcopies, Leyvi (US 6,625,389) teach a system that creates and provides an index of information stored in video data where the portions of the video data are grouped in an organized structure, and Pocock et al (US 5,014,125) teach systems for selectively distributing video presentations to viewers, including systems for enabling viewers to interatively select still frame video images, and accompanying audio to be distributed to them over a television system such as a cable network.

However, Jones et al, Leyvi and Pocock et al fail to explicitly teach a method for reproducing a video session, where the method comprises wherein each of the first video frame and the fourth video frame are generated using a corresponding key frame,

each key frame is associated with a time interval, and each video sub-frame is associated with a time interval subsequent to the time interval of at least one key frame, and where the method further comprises, receiving a command to initiate reproduction of the video session from a particular video sub-frame associated with a selected time interval, determining a key frame associated with a time interval that is prior to the selected time interval and generating a video frame using the determined key frame and the particular video sub-frame.

Regarding claim 15, the invention relates to communication systems, including a system for reproducing a video session using accelerated frame playback.

The closest references Jones et al disclose a method of storing and displaying digital images, including a multiresolution method which makes available reduced resolution versions of original images for quick display and full resolution original images for making photographic quality hardcopies, Leyvi (US 6,625,389) teach a system that creates and provides an index of information stored in video data where the portions of the video data are grouped in an organized structure, and Pocock et al (US 5,014,125) teach systems for selectively distributing video presentations to viewers, including systems for enabling viewers to interatively select still frame video images, and accompanying audio to be distributed to them over a television system such as a cable network.

However, Jones et al, Leyvi and Pocock et al fail to explicitly teach a client for reproducing a video session, where the video session comprises wherein each of the

first video frame and the fourth video frame are generated using a corresponding key frame, each key frame is associated with a time interval, and each video sub-frame is associated with a time interval subsequent to the time interval of at least one key frame, and where the processor is further operable to receive a command to initiate reproduction of the video session from a particular video sub-frame associated with a selected time interval, determine a key frame associated with a time interval that is prior to the selected time interval and generate a video frame using the determined key frame and the particular video sub-frame.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher O. Onuaku whose telephone number is (703) 308-7555. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lees
COO

5/2/05

Groody
James J. Groody
Supervisory Patent Examiner
Art Unit 262 2616